**Unit Plan Overview**

**Unit: Math: Fractions**

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| **Stage 1- Desired Results** | | | | |
| **Connections to Context:**  The students experience sharing with their classmates. The school goals include preparing the students for the future, and knowledge about fractions as well as being fair and equal. The larger societal issues of justice, for first graders, sharing, are addressed in fractions.  (How does this fit with students’ experiences, the school goals, and the larger societal issues?)  **Established Goals**  [CCSS.Math.Content.1.G.A.3](http://www.corestandards.org/Math/Content/1/G/A/3/) Partition circles and rectangles into two and four equal shares, describe the shares using the words *halves*, *fourths*, and *quarters*, and use the phrases *half of*, *fourth of*, and *quarter of*. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.  (What content standards and program- or mission-related goal(s) will the unit address?  What habits of mind and cross-disciplinary goal(s)- for example 21st century skills, core competencies- will this unit address?  Include source and identifying number) | **Transfer** | | | |
| *Students will be able to independently use their learning to…*   * equally partition circles and rectangles into halves, thirds, and fourths * see how fractions can help build relationships with their friends, peers, and family   (What kinds of long-term independent accomplishments are desired?) | | | |
| **Meaning** | | | |
| UNDERSTANDINGS  *Students will understand that…*   * fractions surround themselves in school and at home * fractions can lead to justice (sharing, being fair)   (What speciﬁcally do you want students to understand?  What inferences should they make?) | | ESSENTIAL QUESTIONS  *Students will keep considering…*   * How are fractions used in day-to-day life? * How can fractions be misused? * Why do we have fractions?   (What thought-provoking questions will foster inquiry, meaning- making and transfer?) | |
| **Acquisition of Knowledge, Skill and Values/Commitments/Dispositions** | | | |
| *Cognitive Objectives*  Students should be able to:   * Define a whole and a half * Recognize that a fourth is smaller than a third * Equally divide a circle and rectangle into ½, 1/3, 1/4 * Divide 6 cookies among either 1,2, or 4 friends * Explain how they divided they cookies * Connect their work of dividing their cookies with the book that we read * Identify where fractions are in their day-to-day lives * Combine prior knowledge of fractions with everyday objects around themselves * Connect the numerical expression of a fraction to the symbolic representation in a shape divided * into parts * Decide whether a shape is divided equally or not equally * Explain how they know whether something is equally or not equally divided * Distinguish equal parts from unequal parts by looking at them * Explain how they know whether something is equally or not equally divided * Distinguish equal parts from unequal parts by looking at them   (What facts and basic concepts should students know and be  able to recall?) | *Physical Development Objectives*  Students should be able to:   * Equally divide a rectangle and circle * Equally share a specified amount of objects * Color in any fraction involving halves, thirds and fourths * Divide 6 cookies among either 1,2, or 4 friends * Identify where fractions are in their day-to-day lives * Create a “robot” using fractions and colored pieces of paper * Equally share their skittles with a designated amount of friends   (What discrete skills and processes should students be able to use?) | | *Socio-emotional Objectives*  Students should be able to:   * Share something equally between their friends * Realize when sharing it is important to be fair and equal in all parts * Explain how they divided they cookies * Connect fractions with everyday objects * Articulate what they have learned about fractions   (What values and commitments and attitudes should students acquire or wrestle with?) |
| **Stage 2- Evidence** | | | | |
| **Evaluative Criteria** | *Students will show their learning by…* | | | |
| * Fraction Bot * Fraction Journal * Discussions * Skittle Project   (What criteria will be used in each assessment to evaluate attainment of the desired results?) | PERFORMANCE TASK(S):   * Creating a fraction Bot, fraction Journal, and Final Skittle Project. Through these projects students will demonstrate that they understand the basics of fractions, in terms of whole, halves, thirds, and fourths.   (How will students demonstrate their understanding- meaning-making and transfer- through complex performance?) | | | |
| (Regardless of the format of the assessment, what qualities are most important?) | OTHER EVIDENCE:   * There are worksheets throughout the unit to gauge where students are. * Verbal assessment as we come back together as a class. * Looking at how well students respond in class discussions. * Student Participation in activities will also help me gage the students understanding   (What other evidence will you collect to determine whether Stage 1 goals were achieved? | | | |

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| **Stage 3- Learning Plan** | | |
| Preassessment Activity: Fraction Matching game: board with columns labeled ½, 1/3, ¼, and 1/5.  The pieces were the words: one half, one third, one fourth, and one fifth, as well as a circle divided into  Halves, thirds, fourths, and fifths and the same with rectangles, and then the students sort the pieces into the  Columns.  Pre-assessment- due \_April 7~about one  Week in advance  (What pre-assessments will you use to check students’ prior knowledge, skill levels, and potential misconceptions?) | | |
| (Toward which goal does each learning event build?)  Lesson 1: Acquisition  Lesson 2: Acquisition/Meaning  Lesson 3: Transfer  Lesson 4: Meaning  Lesson 5: Acquisition  Lesson 6: Transfer | Learning Events  *Student success at transfer, meaning, and acquisition depends upon their participation in these learning events…*  Lesson 1:  Apple Demonstration  Equal/Unequal Pieces and Voting with their feet.  Dividing shapes equally and unequally  Lesson 2:  Cookie Demonstration  Fruit Salad Game  Hand motions to remember the different parts of a fraction  Lesson 3:  Stations:  Ipads ~ Fraction Pizza  FractionPillar ~ craft activity  Fraction sorting  Fruit Salad Game  Fraction Worksheet  Lesson 4:  Reading the Book “The Doorbell Rang” by Pat Hutchins  Equal share game with play dough cookies  Lesson 5:  Fraction Journals  Where do we see fractions all around us  Lesson 6:  Fraction Bot  Skittles Sharing   * (Have you included multiple means of representation, multiple means of action and expression, and multiple means of engagement?) * (Are all three types of goals (acquisition, meaning, and transfer) addressed in the learning plan?) * (Does the learning plan reflect principles of learning and best practices?) * (Is there tight alignment with Stages 1 and 2?) | Progress Monitoring   * (How will you monitor students’ progress toward acquisition, meaning, and transfer during lesson events?)   I will be walking around monitoring student work at all times, as well as monitoring student discussion   * (How will students monitor their own progress toward acquisition, meaning, and transfer?)   Students will monitor their own progress through little checkpoints that I have created to help them gage their progress, on a scale of 1-4. 4 being they really understand the ideas, and 1 being I really need help still when I work with fractions   * (What are potential rough spots and student misunderstandings?)   Some potential misunderstandings are the students misunderstanding the idea of a fraction, mixing up the parts of a fraction. One rough spot is small group work and ensuring that all students are engaged   * (How will students get the feedback they need?)   Students will get oral feedback a majority of the time, as we talk through various questions and the different concepts. |